PCT/US2002/038414 10/537143

JC17 Rec'd PCTYPT

## SEQUENCE LISTING

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aaa ag Lys Se 65	r Arg	Ile	Ser	Ile 70	Thr	Arg	Asp	Thr	Ser 75	Lys	Asn	Gln	Tyr	Tyr 80	240
ctc ca Leu Gl	n Leu	aat Asn	ttt Phe 85	gtg Val	act Thr	gct Ala	gag Glu	gac Asp 90	aca Thr	gcc Ala	aca Thr	tat Tyr	aac Asn 95	tgt Cys	288
gca ag Ala Ar	ga agg gg Arg	act Thr 100	ctg Leu	gct Ala	act Thr	tac Tyr	tat Tyr 105	gct Ala	atg Met	gac Asp	tac Tyr	tgg Trp 110	ggt Gly	caa Gln	336
gga ac Gly Th	c tct r Ser 115	gtc Val	acc Thr	gtc Val	tcc Ser	tca Ser 120	ggc	tcg Ser	acg Thr	tcc Ser	ggc Gly 125	tct Ser	ggc	aaa Lys	384
ccg gg Pro Gl	y Ser	ggc Gly	gaa Glu	ggc Gly	tct Ser 135	acc Thr	aag Lys	ggc Gly	gat Asp	ttt Phe 140	gtg Val	atg Met	acc Thr	caa Gln	432
act co	a ctc	tcc Ser	ctg Leu	cct Pro 150	gtc Val	agt Ser	ctt Leu	gga Gly	gat Asp 155	caa Gln	gcc Ala	tcc Ser	atc Ile	tct Ser 160	480
tgc ag Cys Ar	g gct g Ala	agt Ser	cag Gln 165	agc	ctt Leu	gta Val	cac His	agt Ser 170	aat Asn	gga Gly	aac Asn	acc Thr	tat Tyr 175	tta Leu	528

His	Trp	Tyr	Leu 180	Gln	Lys	Pro	GIY	185	ser	PIO	ту	пеп	190	atc Ile	ığı	576
Arg	Val	Ser	aac Asn	Arg	Phe	Ser	G1y 200	Val	Pro	Asp	Arg	205	Ser	ggc Gly	Ser	624
Gly	Ser	ggg Gly	Thr	Asp	Phe	Thr 215	ctc Leu	Lys	IIе	ser	220	vai	GIU	gct Ala	GIU	672
gat Asp 225	a+ a	gga Gly	gtt Val	tat Tyr	ttc Phe 230	tgc Cys	tct Ser	caa Gln	agt Ser	aca Thr 235	cat His	gtt Val	cct Pro	ccg Pro	acg Thr 240	720
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Ala	a Arg	g Arg	Thr 100		Ala	Thr	Туг	Tyr 105	Ala	Met	. Asp	Tyr	Trp 110	Gly	Gln	
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Th:		o Lei	ı Ser	Lev	150		. Ser	Lev	Gly	Asp 155	Glr	Ala	Ser	: Ile	Ser 160	
Сy	s Ar	g Ala	a Sei	Glr 165		Leu	ı Val	l His	Ser 170	Ası	ı Gly	Asr	Thr	Tyr 175	Leu	
Hi	s Tr	р Ту	r Leu 180		ı Lys	s Pro	o Gly	/ Glr 185	ı Sei	Pro	Lys	Leu	190	ı Ile	Tyr	
Ar	g Va	l Se:		a Arg	g Phe	e Ser	Gly 200	y Val	Pro	Asp	Arg	9 Phe 205	e Ser	Gly	Ser	

Gly Ser Gly 210	Thr Asp	Phe Thr 215	Leu Lys	Ile Ser	Arg Val 220	Glu A	la Glu	
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ggt tac tgg Gly Tyr Trp 35								144
atg ggt tac Met Gly Tyr 50			ggt atc		tac aat			192
aaa agt cgc Lys Ser Arg 65					aag aac			240
ctc cag ttg Leu Gln Leu	aat ttt Asn Phe 85	gtg act Val Thr	gct gag Ala Glu	gac aca Asp Thr 90	gcc aca Ala Thr	tat aa Tyr As 95	n Cys	288
gca aga agg Ala Arg Arg								336
gga acc tct Gly Thr Ser 115								384
ccg ggc tct Pro Gly Ser 130			acc aag		ttt gtg			432
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tgc agg gct Cys Arg Ala	agt cag	agc ctt		agt aat			t tta r Leu	528
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aga gtt tcc Arg Val Ser 195	aac cga	Phe Ser	ggg gtc			agt gg		624
gga tca ggg Gly Ser Gly 210	aca gat	ttc aca	ctc aag	atc agc Ile Ser	aga gtg	gag gc Glu Al	t gag a Glu	672

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Pro	His 290	Tyr	tac Tyr	Thr	Phe	Gly 295	Lys	Ala	Asp	Ile	Ala 300	Ala	Asn	Lys	Pro	912
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Tyr	Āla	Asn	gcc Ala	Ser 405	Ile	Gly	Leu	Phe	Gly 410	Ala	Leu	Ala	Val	Lys 415	Pro	1248
Ser	Ğİy	Met	Pro 420	Tyr	Glu	Gln	Ala	Met 425	Thr	Thr	Arg	Val	Leu 430	Lys	Pro	1296
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Met	Ala	Asn	tgg Trp	Val 485	Met	Ala	Asn	Met	Ala 490	Pro	Glu	Asn	Val	A1a 495	Asp	1488
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gtg gcc Val Ala	Phe :	Ile 580	Pro	Glu	Lys	Gln	Ile 585	Gly	Ile	Val	Met	Leu 590	Ala	Asn	1776
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Lys Ser 65	Arg	Ile	Ser	Ile 70	Thr	Arg	Asp	Thr	Ser 75	Lys	Asn	Gln	Tyr	Tyr 80	
Leu Gln	Leu	Asn	Phe 85	Val	Thr	Ala	Glu	Asp 90	Thr	Ala	Thr	Tyr	Asn 95	Cys	
Ala Arg	Arg	Thr 100	Leu	Ala	Thr	Tyr	Tyr 105	Ala	Met	Asp	Tyr	Trp 110	Gly	Gln	
Gly Thr	Ser 115						Gly				Gly 125	Ser	Gly	Lys	
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Cys Arg	Ala	Ser	Gln 165	Ser	Leu	Val	His	Ser 170	Asn	Gly	Asn	Thr	Tyr 175	Leu	
His Trp	Tyr	Leu 180	Gln	Lys	Pro	Gly	Gln 185	Ser	Pro	Lys	Leu	Leu 190	Ile	Tyr	
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Ala	Ser	Trp	Val	His 565	Lys	Thr	Gly	Ser	Thr 570	Gly	Gly	Phe	Gly	Ser 575	Tyr	
Val	Ala	Phe	Ile 580	Pro	Glu	Lys	Gln	Ile 585	Gly	Ile	Val	Met	Leu 590	Ala	Asn	
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